Appl. No. 09/870,302
Amendment dated: January 18, 2006
Reply to Office Action of: October 19, 2005

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Amendments to the Claims:

Please cancel claim 20 without prejudice or disclaimer. This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1.   (Currently Amended) A content exchange apparatus for ~~eacheing~~ caching content objects, the content exchange apparatus comprising:

a content store comprising a plurality of content objects, each content object originating from one of a plurality of origin servers and wherein the content exchange apparatus is configured to receive from at least one of the origin servers a predetermined period of time associated with at least one of the content objects and indicating a time for which that content object will be stored in the content store;

a content tracker that determines the content objects stored in the content store and configured to receive identifiers ~~directly~~ from the plurality of origin servers;

an origin server database comprising a list of the origin servers identified to the content tracker by the respective origin server; and

a catalog of content objects stored in the content store.

2.   (Currently Amended) The content exchange apparatus for ~~eacheing~~ caching content objects as recited in claim 1, wherein the list of origin servers is modified to exclude a particular origin server when a determination is made that the particular origin server is no longer available.

3.   (Currently Amended) The content exchange apparatus for ~~eacheing~~ caching content objects as recited in claim 1, wherein the list of origin servers contains some origin servers that have no content objects stored in the content exchange.

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4.   (Currently Amended) The content exchange apparatus for ~~cacheing~~ caching content objects as recited in claim 1, wherein content objects associated with a particular origin server are removed from the content store when a determination is made that the particular origin server is no longer available.

5.   (Currently Amended) The content exchange apparatus for ~~cacheing~~ caching content objects as recited in claim 1, wherein:

the content store is divided into a first section and a second section;

the first section comprises a cache where less frequently requested content objects are purged in favor of more frequently requested content objects; and

the second section comprises a file system where content objects remain stored in the content store for a period of time regardless of request frequency~~; and~~

~~wherein the content exchange apparatus is configured to receive the period of time associated with at least one of the content objects in the second section from the respective origin server~~.

6.   (Currently Amended) The content exchange apparatus for ~~cacheing~~ caching content objects as recited in claim 1, further comprising a content controller, wherein the content controller finds a requested content object not presently retained in the content store.

7.   (Currently Amended) The content exchange apparatus for ~~cacheing~~ caching content objects as recited in claim 1, further comprising a content controller, wherein the content controller finds a requested content object not presently retained in the content store on one of: another content exchange and the origin server.

8.   (Currently Amended) The content exchange apparatus for ~~cacheing~~ caching content objects as recited in claim 1, further comprising an information repository comprising status information related to the content exchange.

9.   (Currently Amended) A content storing system for ~~cacheing~~ caching content objects, the content storing system comprising:

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a first content exchange;

a second content exchange; and

a content bus coupled to the first and second content exchanges, wherein:

the first content exchange comprises an origin server database comprising a list of origin servers identified to the content exchange ~~directly~~ by the respective origin server, ~~and~~

the list of origin servers contains a plurality of origin servers that have no content objects stored in the first content exchange[[.]] <u>, and</u>

<u>the second content exchange comprises a content store comprising a plurality of content objects, each content object originating from one of the plurality of origin servers and wherein the second content exchange is configured to receive from at least one of the origin servers a predetermined period of time associated with at least one of the content objects and indicating a time for which that content object will be stored in the content store.</u>

10.   (Currently Amended) The content storing system for ~~cacheing~~ <u>caching</u> content objects as recited in claim 9, wherein the list of origin servers is modified to exclude a particular origin server when a determination is made that the particular origin server is no longer available.

11.   (Currently Amended) The content storing system for ~~cacheing~~ <u>caching</u> content objects as recited in claim 9, wherein content objects associated with a particular origin server are removed from the content store when a determination is made that the particular origin server is no longer available.

12.   (Currently Amended) The content storing system for ~~cacheing~~ <u>caching</u> content objects as recited in claim 9, wherein:

the second content exchange is divided into a first section and a second section;

the first section comprises a cache where less frequently requested content objects are purged in favor of more frequently requested content objects; and

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the second section comprises a file system where content objects remain stored in the second content exchange for a period of time regardless of request frequency.

13.   (Currently Amended) The content storing system for ~~eacheing~~ caching content objects as recited in claim 9, wherein the content bus transports a requested content object not presently retained in the first content exchange from the second content exchange.

14.   (Currently Amended) The content storing system for ~~eacheing~~ caching content objects as recited in claim 9, further comprising a content controller, wherein the content bus transports a requested content object not presently retained in the first content exchange from one of the second content exchange and an origin server.

15.   (Currently Amended) A method for caching content objects in a content exchange, the method comprising steps of:

storing content objects obtained from an origin server by the content exchange wherein the content exchange apparatus is configured to receive from the origin server a predetermined period of time associated with at least one of the content objects and indicating a time for which that content object will be stored in the content store;

receiving information about the origin server ~~directly~~ from the origin server;

storing the information in a database;

determining a network address for the origin server using the database; and

contacting one of the origin server and another content exchange when a content object request results in a cache miss.

16.   (Original)   The method for caching content objects in the content exchange as recited in claim 15, wherein the database comprises an origin server identifier and an origin server address for each associated origin server.

17.   (Original)   The method for caching content objects in the content exchange as recited in claim 15, wherein the storing step comprises a step of storing an origin server identifier and an origin server address for each associated origin server.

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18.   (Original)   The method for caching content objects in the content exchange as recited in claim 15, wherein the determining step comprises a step of querying the database for an origin server address associated with a provided origin server identifier.

19.   (Original)   The method for caching content objects in the content exchange as recited in claim 15, wherein the contacting step comprises steps of:

determining if any other content exchange has at least a portion of the content object;

requesting the portion if the portion is found on any other content exchange; and

requesting the portion from the origin server if the portion is not found on any other content exchange.

20.   (Canceled)